

HIRSCHLEROWA, Zofia; KOZAR, Zbigniew

Sabin-Feldman test as a method of investigation of the resistance mechanism. Bull. Inst. Marine Trop. M. Gdansk 7:p.145-150; Russian transl. p. 150-152; English transl. p. 153-155 1956.

1. Z Panst. Inst. Med. Mors. Trop. w Gdansku.
(TOXOPLASMOSIS, diagnosis,
dye test (Pol; Rus; English))

EXCERPTA MEDICA Sec. 17 Vol. 3/3 Public Health Mar. 57

774. KOZAR Z. Państw. Inst. Med. Morsk. i Trop., Gdańsk. *Further investigations upon occurrence of toxoplasmosis in Poland (Polish, Russian and English text) BIUL. PAŃSTW. INST. MED. MORSK. TROP. GDAŃSK 1956, 7 (156-164)

Clinical diagnosis of about 400 cases of toxoplasmosis in human beings in Poland was confirmed by Sabin-Feldman tests and in some cases by complement fixation tests, although toxoplasma strains were not isolated. The authors consider that toxoplasmosis exists among human beings in Poland. Zuckerman - Jerusalem

KOZAR, Zbigniew; SOSZKA, Stefan

Hormonal factors in the development of toxoplasmosis. Bull.
Inst. Marine Trop. M. Gdansk 7:165-168 1956.

1. Z Panst. Inst. Med. Mors. Trop. w Gdansku i Akad. Med. w
Bialymstoku.

(GONADOTROPINS, PITUITARY, effects,
on exper. toxoplasmosis (Pol))
(TOXOPLASMOSIS, experimental,
eff. of pituitary gonadotropins (Pol))

KOZAR, Zbigniew; SZYMANSKA, Helena

Epidemiological investigations on intestinal parasites at a psychiatric hospital. Bull. Inst. Marine Trop. M. Gdansk 7: 169-180 1956.

1. Z Panst. Inst. Med. Mors. i Trop. w Gdansku.
(HELMINTH INFECTIONS, epidemiology,
survey in psychiat. hosp. (Pol))

EXCERPTA MEDICA Sec 7 Vol. 11/7 Pediatrics July 57

1873. KOZAR Z. and SZYMAŃSKA H. Państ. Inst. Med. Morsk. i Trop., Gdańsk.
*A contribution to the frequency of incidence of intestinal
parasites among the rural children of the Gdańsk
districts (Polish, Russian and English text) BIUL. PAŃSTW.
INST. MED. MORSK. TROP. GDĄSK 1956, 7 (179-186) Tables 2

The diversity of the rate of infection with various parasites in children from
localities situated close to each other suggests that it is determined by local
factors. Some rural communities showed lower infection rates than the city of
Gdańsk.
Bais - The Hague (XVII, 7)

KOZAR, Zbigniew

Immunologic phenomena in trichinosis. Postepy hig. med. dosw.
10 no.4:329-358 1956.

1. Instytut Medycyny Morskiej Gdansk-Wrzeszcz, ul. Hiberna 1 c.
(TRICHINOSIS, immunology,
review (Pol))

KOZAR, Z.

Polish Parasitological Society. Zool.zhur. 35 no.6:947-948
Je '56. (MLRA 9:10)

1. General'nyy sekretar' Glavnogo upravleniya Pol'skogo
parazitologicheskogo obshchestva.
(Poland--Parasitological societies)

KOZAR, Zbigniew

Ten years of activity of the Parasitological Laboratory of the
Institute of Marine Medicine in Gdansk. Wiadomosci parazyt.,
Warsz. 3 no.1:19-25 1957.

(PARASITOLOGY

Parasitol. Laboratory of Institute of Marine Med., Gdansk,
Poland, activities (Pcl))

x

KOZAR, Zbigniew

Critical survey of research on problems of medical parasitology carried out since the last meeting (1954-1956) Wiadomosci parazyt., Warsz. 3 no.2-3:107-148 1957.

1. Z Instytutu Medycyny Morskiej w Gdansk.
(PARASITOLOGY
research in Poland (Pol))

Kozar, Zbigniew

KOZAR, Zbigniew

~~Institute of tropical medicine in Hamburg. Wiadomosci parazyt.,
Warsz. 3 no.5:505-514 1957.~~

(MEDICINE, TROPICAL

Bernhard-Nocht Institut fur Schiffs. & Tropenkrankheiten
in Hamburg (Pol))

EXCERPTA MEDICA Sec 17 Vol 5/2 Public Health Feb 59

713. SEARCH FOR A RESERVOIR OF TRICHINELLOSIS IN SMALL MAMMALS OF THE BIALOWIEŻA FOREST - Poszukiwanie rezerwuaru włośnicy wśród drobnych ssaków Puszczy Białowieskiej - Kozar Z. and Warda L. Zegl. Parazytol. Inst Med. Morskiej, Gdańsk - ACTA PARASIT. POL. 1957, 5/13-21 (481-485) Tables 1

1,759 small forest mammals (6 species of Insectivora and 11 species of Rodentia) caught in the Białowieża National Park during a few years were examined by the compression method. Trichinella were never found. Contrary findings by other workers are discussed. It is suggested that the Trichinella larvae were confused with the larvae of other nematodes (e.g. of the genus Porrocaecum), which were found by the present authors as well.

KOZAR, Zbigniew

Proper position of medical parasitology. Polski tygod. lek.
12 no.7:257-260 11 Feb 57.

1. Adres: Gdansk-Wrzeszcz u. Hibnera 1c, Instytut Medycyny
Morskiej.

(PARASITOLOGY
in Poland, review (Pol))

KOZAR, Z.

Fifth Congress of the Polish Parasitological Society in Warsaw.
Med.paraz. i paras.bol. 26 no.2:248-250 Kr-Ap '57. (MIRA 10:7)
(POLAND--PARASITOLOGY)

POLAND/Zooparasitology - Parasitic Protozoa. Flagellates.

G.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95285

Author : Kozar, Zbigniew

Inst : -

Title : Problem of Toxoplasmosis at the Congress on Parasitology
in Prague.

Orig Pub : Wiadom. parazytol., 1958, 4, No 1, 39-49

Abstract : No abstract.

Card 1/1

- 4 -

KOZAR, Zbigniew

Control of Trichinella and tapeworms. Wiadomosci parazyt., Warsz. 4 no.
3:211-218 1958

1. Z Instytutu Medycyny Morskiej w Gdansk.
(TRICHINOSIS, prevention and control,
in Poland (Pol))
(TAPEWORM INFECTIONS, prev. & control.
same (Pol))

EXCERPTA MEDICA Sec 4 Vol 12/9 Med. Micro. Sept 59

2909. ACTION OF HYALURONIDASE ON INFECTION WITH TOXOPLASMA
GONDII IN MICE - Wpływ hialuronidazy na zakażenie Toxoplasma gondii u
myszy - Kozar Z. Zakł. Parazytol. PAN, Warszawa - WIAD. PARAZYT.
1958, 4/5-6 (427-430) Tables 1

Hyaluronidase was prepared according to the method of Freeman et al., and stan-
dardized according to Kass and Seastone. Despite a certain toxicity of this prepar-
ation with respect to Toxoplasma, accelerated death of infected mice after hyalur-
onidase treatment was demonstrated. Application of hyaluronidase may be useful
in isolation experiments.

Adamski - Poznań

EXCERPTA MEDICA Sec 17 Vol 5/9 Public Health Sept 59

2607. INVESTIGATIONS ON THE EPIDEMIOLOGY OF TOXOPLASMOSIS BY MEANS OF THE INTRADERMAL TEST - Badania nad epidemiologią toksoplazmozy przy pomocy próby śródskórnej - Kozar Z. Dept. of Parasitol., Polish Acad. of Scis, Warsaw - ACTA PARASIT. POL. 1958, 6/8-21 (225-249) Tables 4 Illus. 1

In the Bialystok palatinate, 1,410 persons were tested intradermally with an antigen prepared by the author: 39% reacted positively. Among the various localities, the proportion of positives varied from 19-76%. Of the women 44% were positive, of the men 30%. This difference may be traceable to a closer contact of women with animals and their products. The incidence of positive reactions increased with age, the maximum for women occurring from 30-60 yr., that for men from 50-60 yr. Of the various professional groups, sanitary personnel such as midwives, nurses, etc. were most frequently positive (71%). The author states that in the provincial hospitals sanitary conditions are often poor. Remarkably, the second most affected group was the intelligentsia, with 56% positives; in this group, the men had far more positive reactions than the women. The agricultural and house-keeping groups showed 45% positive reactions, the school youth 35%, and physical labourers 24%. Intradermal tests with both toxoplasmin and trichinella antigen at the same time were given to 1,326 persons. In 65% of these there was agreement of results; in 50% both tests were negative; in 14% both tests were positive. Of the 35% where there was no agreement, the toxoplasmin test was positive and the test for trichinosis negative in 23%, while in 12% the former test was negative and the latter positive.

De Roever-Bonnet - Amsterdam (XVII, 50)

EXPERIMENTAL MEDICA Sec 2 Vol 13/8 Pediatrics Aug. 59

2131. INVESTIGATIONS ON TRICHINOSIS WITH THE HELP OF THE INTRADERMAL TEST. I. THE SIGNIFICANCE OF THE INTRADERMAL TEST IN FRESH AND OLD INFECTIONS - Untersuchungen über die Trichinellose mittels des Intradermaltestes. I. Bewertung des Intradermaltestes bei frischen und älteren Infektionen - Kozar Z., Kolloto B. and Warda L. Inst. für Meeres- und Tropenmed., Gdansk; Sanit. Epidemiol. Station, Białystok - ZBL. BAKT. I. ABT. ORIG. 1958, 172/1-2 (164-174)

Tables 4

A preparation of lyophilized antigen from *Trichinella spiralis* larvae, obtained from an artificially infected pig, was made by Witebsky, Wells and Heide's method (N. Y. State J. Med. 1942, 42, 431); 0.1 ml. of the antigen in 1:10,000 dilution was injected into the skin of the forearm, and the result read after 30 min., 1 hr. and 24 hr. Two groups of patients were tested. The first group consisted of 180 subjects who had contracted the infection 7 to 28 days previously. The 2nd group was composed of 99 persons who had been infected with *Trichina* not less than 6 months, and in some cases as much as 20 yr. previously. In spite of considerable variations in its intensity, the test was found specific and rather sensitive. It first became positive about 20 days after infection, and remained positive for as long as 20 yr. The intensity of the infection was found to somewhat influence the time of appearance of the reaction, and also its duration. In the first weeks of the disease, appearance of the reaction was accelerated; in the late stages, delayed.

Véghelyi - Budapest (L. 6, 7, 17)

EXCERPTA MEDICA Sec 17 Vol 5/6 Public Health June 59

1691. INVESTIGATIONS ON TRICHINOSIS WITH THE HELP OF THE INTRA-
DERMAL TEST. II. EPIDEMIOLOGICAL INVESTIGATIONS IN THE AREA
OF BIALYSTOK - Untersuchungen über die Trichinellose mittels des Intra-
dermaltestes. II. Epidemiologische Untersuchungen im Gebiete von Bialystok -
Kozar Z., Kolloto B. and Warda L. Inst. für Meeres- und
Tropenmed., Gdansk; Sanit. Epidemiol. Station, Bialystok - ZBL. BACT.,
I. ABT. ORIG. 1958, 172/1-2 (175-183) Tables 3

For years, the highest incidence of trichinellosis in Poland has been reported from
the northwestern region of the country, the area around Bialystok. This area in-
cludes part of a virgin forest, in the Russian part of which up to 5% of the animals
were found to be infected. To establish the human incidence of trichinellosis in the
area in question, some 2500 persons were subjected to the intradermal test. A
positive response was obtained in 38%. Postmortem studies in Bialystok revealed
an over-all infection rate of 15%, with 46% in the 31-40 yr. age group.

Véghelyi - Budapest (L. 17)

KOZAR, Zbigniew

Problems of pathogenesis and therapy of trichinellosis. Postepy
hig.med.dosw. 13 no.5:587-628 '59.
(TRICHINOSIS)

KOZAR, Zbigniew

Hundredth anniversary of the discovery of trichinosis. Wiadomosci
parazyt., Warsz. 6 no.1:3-10 '60.
(TRICHINOSIS hist.)

KOZAR, Zbigniew

Reflections after a visit with Bulgarian medical parasitologists.
Wiadomosci parazyt., Warsz. 6 no.1:41-52 '60.
(PARASITOLOGY)

KURYLO-BOROWSKA, Zofia; KOZAR, Zbigniew

The general chemical composition of muscle trichinella spiralis larvae. Wiadomosci parazyt. 6 no.4:357-359 '60.

1. The Institute of Marine Medicine in Gdansk and the Department of Parasitology of the Polish Academy of Sciences in Warsaw.
(TRICHINELLA chem)

KOZAR, Zbigniew; KOZAR, Maria

Influence of muscular work and other factors on the course of
the invasion of trichinella spiralis. Wiadomosci parazyt. 6 no.4:
363-366 '60.

1. Department of Parasitology, Polish Academy of Sciences, Warsaw.
(TRICHINOSIS exper)

KOZAR, Zbigniew

Studies on the problem of the role of toxoplasmosis in obstetrics.
Wiadomosci parazyt., Warsz. 6 no.5:399-414 '60.

1. Zaklad Parazytologii PAN, Warszawa.
(TOXOPLASMOSIS in pregn)
(PREGNANCY compl)
(ABNORMALITIES etiol)

KOZAR, Zbigniew

Certain pathological and diagnostic problems in toxoplasmosis and trichinosis. Pat.polska 11 no.4:407-416 '60.

1. Z Zakladu Parazytologii Inst. Medycyny Morskiej w Gdansk,
Kierownik: doc.dr Z. Kozar.
(TOXOPLASMOSIS)
(TRICHINOSIS)

KOZAR, Zbigniew

Mechanisms of invasion and migration of parasites in host's organism.
Wiad. parazyt. 7 no.3:541-559 '61.

1. Katedra Parazytologii i Chorob Inwazyjnych WSR, Wroclaw.
(PARASITIC DISEASES transm) (PROTEASES metab)

KOZAR, Zbigniew

Considerations on the epidemic of trichinosis in Mosin. Wiad.
parazyt. 7 no.3:587-594 '61.

1. Katedra Parazytologii i Chorob Inwazyjnych WSR, Wroclaw.
(TRICHINOSIS epidemiol)

KOZAR, Zbigniew (Wroclaw, Norwida 29)

Some scientific and practical problems concerning toxoplasmosis.
Wiad parazyt 7 no.4/6:867-874 '6.

1. Katedra Parazytologii i Chorob Inwazyjnych, Wyzsza Szkola
Rolnicza, Wroclaw.

x

KOZAR, Zbigniew, prof.

Activities of the Polish Parasitological Society in the years
1948-1960. Nauka Pol 9 no.4:179-189 O-D '61.

1. Przewodniczący Polskiego Towarzystwa Parazytologicznego,
Wrocław, ul. C. Norwida 29.

KCZAR, Zbigniew

SURNAME, Given Names

Country: Poland

Academic Degrees: Prof. Dr.

Affiliation: Director, Faculty of Parasitology and Invasive Diseases (Katedra Parazytologii i Chorob Inwazyjnych), Veterinary Division (Wydział Weterynarii), College of Agriculture (WSR--Wyższa Szkoła Rolnicza

Source: Wroclaw

Source: Warsaw, Medycyna Weterynaryjna, Vol XVII, No 6, June 1961, pp 332-

Data: -336.

Data: "'Trichinella Free.'"

109

GPG 981643

KOZAR, Zbigniew, professor

The Polish Parasitological Society. Review Pol Academy 7 no.1:63-65 Ja-Mr '62

1. Chairman of the Polish Parasitological Society, Wroclaw, ul. Norwida 29.

KOZAR, Zbigniew, secretary of the commission

The most outstanding actual tasks of the International Commission on Trichinellosis. Wiadomosci parazyt. 8 no.1:11-16 '62.

1. Department of Parasitology, Norwida 29, Wroclaw, Poland.

(TRICHINOSIS)

KOZAR, Zbigniew

Summing up of the conferences on the problems of toxoplasmosis in men and animals. Wlad parazyt 7 no.4/6:963-965 '61.

KOZAR, Z. -

The review of current literature on trichinellosis. Wlad. parazyt. 8
no.6:651-701 '62.

(TRICHINOSIS)

(BIBLIOGRAPHY)

KOZAR, Zbigniew

Progress in the therapy of helminthiases of domestic animals.
Wiad. parazyt. 9 no.3:211-228 '63.

1. Katedra Parazytologii i Chorob Inwazyjnych WSR, Wroclaw.
(HORSE DISEASES) (CATTLE DISEASES)
(STRONGYLOIDIASIS) (OXYURIASIS)
(TRICHOSTRONGYLOSIS) (HELMINTHIASIS)
(FASCIOLIASIS) (ANTHELMINTICS)
(PARASITIC DISEASES)

KOZAR, Zbigniew; KOZAR, Maria

The course of experimental trichinellosis in mice. Methods of infection and the influence of various invasive doses on the mortality and weight of the animals. Wlad. parazyt. 9 no.5:403-418 '63.

1. Laboratory of Anthroponoses of the Department of Parasitology of the Polish Academy of Sciences and Department of Parasitology, Veterinary Faculty, College of Agriculture, Wrocław.

*

KOZAR, Zbigniew; SLADKI, Edward; KOZAR, Maria

Studies on the possibility to make use of pharmacological properties of azulenes for the treatment of acute and chronic trichinellosis. Wlad. parazyt. 9 no.5:419-434 '63

1. Laboratory of Antropozoonoses of the Department of Parasitology of the Polish Academy of Sciences and Department of Parasitology Veterinary Faculty, College of Agriculture in Wroclaw, and the I Clinic of Internal Diseases, Medical Academy in Lodz.

X

KARPIAK, Stanislaw, E.; KOZAR, Zbigniew; KRZYZANOWSKI, Marian

Changes in the metabolism of the skeletal muscles of guinea pigs caused by the invasion of *Trichinella spiralis*. I. Influence of the invasion on the carbohydrate metabolism of muscles. Wlad. parazyt. 9 no.5:435-446 '63.

1. Laboratory of Anthrophozocooses, Department of Parasitology Polish Academy of Sciences, Wroclaw.

*

ZARZYCKI, Jan; KOZAR, Zbigniew; CZAJKOWSKA, Jadwiga.

Supravital staining of the intestine and muscle tissue during infection with Trichinellae. Wiad. parazyt. 9 no.5:447-451 '63.

1. Department of Histology and Embryology, Veterinary Faculty, College of Agriculture, Wrocław, and Laboratory of Anthrozooses of the Department of Parasitology, Polish Academy of Sciences, Wrocław.

*

KOZAR, Zbigniew; KARPIAK, Stanislaw; KRZYZANOWSKI, Marian; KOZAR, Maria

Metabolism of *Trichinella spiralis* larvae. *Wlad parazyt.* 10
no.4:280-281 '64

The effect of *Trichinella spiralis* infection on fat metabolism
and enzyme activity of the Krebs cycle in skeletal muscles of
guinea pigs. *Ibid.*:282-283

1. Pracownia Antropozoocz Zakladu Parazytologii Polskiej Akademii
Nauk, Katedra Parazytologii i Chorob Inwazyjnych i Katedra Chemii
Fizjologicznej Wyzszej Szkoły Rolniczej, Wroclaw.

KOZAR, Zbigniew; PARZYCKI, Jan; SENIUTA, Róża; MARTYNOWICZ, Tadeusz;
KASSNER, Jerzy

Histochemical studies on the intestinal phase of trichinosis in mice. Wlad. parazyt. 10 no.4:293-294 '64

1. Pracownia Antropozoonoz Zakładu Parazytologii Polskiej Akademii Nauk, Wrocław; oraz Katedra Parazytologii i Chorob Inwazyjnych i Zakład Histologii Wyższej Szkoły Rolniczej, Wrocław.

KOZAR, Zbigniew; OGIELSKI, Leslaw

Trichinosis in pigs in Poland. Wiad. parazyt. 10 no.4:352-353
'64.

1. Pracownia Antropozoonoz Zakladu Parazytologii Polskiej
Akademii Nauk i Katedra Parazytologii i Chorob Inwazyjnych
Wyzszej Szkoły Rolniczej oraz Katedra Higieny Srodkow Spo-
zywczych Zwierzęcego Pochodzenia, Wyzsza Szkoła Rolnicza,
Wroclaw.

SLADKI, Edward; KOZAR, Eblegiew

Chronic trichinosis in diseases of the muscular and circulatory systems. Wlad. parazyt. 10 no.4s356-337 '61

1. Pracownia Antropozoonoz Zakladu Parazytologii Polskiej Akademii Nauk, Wroclaw, i Klinika Chorob Wewnętrznych Akademii Medycznej, Lodz.

KOZAR, Maria; KOZAR, Zbigniew; KARMANSKA, Krystyna

Comparative evaluation of agglutination tests in the diagnosis of trichinosis. Wlad. parazyt. 10 no. 4:344-346 '64

1. Pracownia Antropozoonoz Zakładu Parazytologii Polskiej Akademii Nauk, Wrocław, i Katedra Parazytologii i Chorob Inwazyjnych Wyższej Szkoły Rolniczej, Wrocław.

KOZAR, Zbigniew; KURCIO, Wladyslaw

Epidemiologic study of trichinosis by means of the skin test on inhabitants of Miechow in Cracov region. Wlad. parazyt. 10 no.4:350-351 '64

1. Pracownia Antropozoonoz Zakladu Parazytologii Polskiej Akademii Nauk, Wroclaw i Powiatowy Wydzial Zdrowia, Miechow.

KOZAR, Zbigniew; KOZAR, Maria

Comparative studies on the infectivity pathogenicity of
Trichinella spiralis strains from Poland and Africa. Wlad.
parazyt. 10 no.4:358-359 '64

1. Pracownia Antropozoonoz Zakladu Parazytologii Polskiej
Akademii Nauk, Wroclaw i Katedra Parazytologii i Chorob
Inwazyjnych Wyzszej Szkoły Rolniczej, Wroclaw.

KOZAR, Zbigniew; SLADKI, Edward; ZOLNIERKOWA, Danuta

Clinical aspects of chronic trichinellosis in people. I.
Periodical examinations and therapeutic trials in patients
with chronic trichinellosis in the light of recent patho-
genetic considerations. Wlad. parazyt. 10 no.6:651-663 '64

1. Laboratory of Antropozoonoses of the Department of Para-
sitology, Polish Academy of Sciences, and Department of
Parasitology, Veterinary Faculty, Wroclaw, Poland.

KOZAR, Zbigniew; SLADKI, Edward; ZAK, Edward

Clinical aspects of chronic trichinellosis in people. II.
Studies in patients with chronic diseases of the motoric
system. Wlad. parazyt. 10 no.6:665-671 '64

1. Laboratory of Antropozoonoses of the Department of Para-
sitology, Polish Academy of Sciences, and Department of
Parasitology, Veterinary Faculty, Wroclaw, Poland.

KOZAR, Zbigniew; SLADKI, Edward

Clinical aspects of chronic trichinellosis in people. III. Analysis of clinical and anatomopathologic diagnoses of cases in which Trichinella infection was detected in post-mortem examinations. Wlad. parazyt. 10 no. 6: 673-690 '64

1. Laboratory of Antropozoonoses of the Department of Parasitology, Polish Academy of Sciences, and Department of Parasitology, Veterinary Faculty, Wroclaw, Poland.

KOZAR, Maria; KOZAR, Zbigniew; KARMANSKA, Krystyna

The comparative evaluation of some agglutination tests in the diagnosis of trichinellosis. Wiad. parazyt. 10 no.6:717-737 '64

1. Laboratory of Antropozoonoses of the Department of Parasitology, Polish Academy of Sciences and Department of Parasitology, Veterinary Faculty, Wroclaw, Poland.

KOZAR, Zbigniew; KURCIO, Wladyslaw

Epidemiologic investigations on trichinellosis by means of
allergic test in Miechow district, Cracow voivodeship.
Wiad. parazyt. 10 no.6:739-746 '64

1. Laboratory of Antropozoonoses of the Department of Parasito-
logy, Polish Academy of Sciences and Department of Parasitology,
Veterinary Faculty, Wroclaw, Poland.

KOZAR, Zbigniew

The role of the Polish Parasitologic Society in the development of parasitology in post-war Poland. Wiad. parazyt. 11 no.1:9-21 '65.

1. Prezes Polskiego Towarzystwa Parazytologicznego.

KOZAR, Zbigniew; KARPIAK, Stanislaw

Significance of studies on the metabolism of parasitic helminths.
Wiad. parazyt. 11 no.1.55-97 '65.

1. Pracownia Antropozoonoz Polskiej Akademii Nauk, Katedra
Parazytologii i Katedra Chemii Fizjologicznej Wyzszej Szkoły
Rolniczej, Wroclaw.

KOZAR, Zbigniew

Current scientific and practical problems of trichinosis. Wiad.
parazyt. 11 no.1:191-196 '65.

1. Katedra Parazytologii i Chorob Inwazyjnych Wydziału Weterynar.
Wyszej Szkoły Rolniczej i Pracownia Antropozocnoz, Polska
Akademia Nauk, Wrocław.

KOZAR, Z.

The review of current literature on trichinellosis. Wlad.
parazyt. 11 no.4:353-423 '65.

KOZAR, Zbigniew; KOZAR, Maria

Incidence of *Trichinella spiralis* in the Polish population on the basis of post-mortem examinations. Wiad. parazyt. 11 no.4:233-243 '65.

Experimental trichinellosis of mice induced by parenteral injection of muscular larvae. Ibid.:335-349

1. The Laboratory of Anthroponoses, Polish Academy of Sciences and the Department of Parasitology, Veterinary Faculty, Wrocław, Poland.

KOZAR, Zbigniew; OGIELSKI, Leslaw

Trichinosis of pigs in Poland in the post-war period with special reference to 1960-1962. Wiad. parazyt. 11 no.4: 245-283 '65.

1. Pracownia Antropozoonoz Polskiej Akademii Nauk, Katedra Parazytologii i Chorob Inwazyjnych oraz Katedra Higieny Srodkow Spozywczych Wyzszej Szkoły Rolniczej, Wrocław.

KOZAR, Zbigniew; RAMISZ, Alojzy; KOZAR, Maria

Incidence of *Trichinella spiralis* in some domestic and wild living animals in Poland. Wiad. parazyt. 11 no.4:285-298 '65.

1. Department of Parasitology of the Veterinary Faculty, and Laboratory of Anthroponoses, Polish Academy of Sciences in Wroclaw.

KOZAR, Zofija

Pulmonary resection in two children with postprimary cavernous tuberculosis. Zdrav.vest., Ljubljana 24 no.3:104-105 1955.

1. Otroški oddelek specialne bolnisnice za tuberkulozne v Novem Celju . ravnatelj Dr. Ivan Kopac.
(TUBERCULOSIS, PULMONARY, in infant and child,
cavitation, pulm. resection)

VORONTSOV-VEL'YAMINOV, B.A.; DOKUCHAYEVA, O.D.; YEFREMOV, Yu.I.;
KOZARENKO, B.I.; KARIMOVA, D.K.; KOSTYAKOVA, Ye.B.; LOZINSKIY, A.M.;
MANOVA, G.A.; TSITSIN, F.A.; SHAROV, A.S.

Observations of Arend-Roland's comet (1956 h). Astron.tsir.
no.180:2-4 My '57. (MIRA 13:4)

1. Gosudarstvennyy astronomicheskiy institut im. P.K.Shernberga,
Moskva.

(Comets--1956)

BUGOSLAVSKAYA, Ye.Ya. [deceased]; KOZARENKO, B.I.

The KIM-3 measuring instrument. Trudy GAISH 30:164-180 '61. ""
(Astronomical instruments) (MIRA 14:8)

KOZARENKO, B.I.

Determining the optical center of the AFR-1 plate. Socb.GAISH
no.104:39-41 '61. (MIRA 15:3)
(Astronomical photography--Equipment and supplies)

KOZARENKO, B.I.

Determining the brightness equation for the 400mm. astrograph
of the Main Astronomical Observatory of the Academy of Sciences
of the Ukrainian S.S.R. Soob.GAISH no.104:42-54 '61.

(MIRA 15:3)

(Telescope)

KOZARENKO, B.I.

Photography of the moon among the stars with the AFR-1 wide-angle
astrograph. Soob.Gaish no.121:25-68 '62. (MIRA 16:5)
(Moon--Photographs)

507/492

KOZARENKO, D.T.

International symposium on macromolecular chemistry, Moscow, 1960.
 Mashmarodnyy slovar' po makromolekulyarnoy khimii SSSR, Moskva, 1968
 Iyunya 1960 g.; doklady i referaty. Sotrud. I. (International Symposi-
 um on Macromolecular Chemistry Held in Moscow, June 11-16, 1960; Papers and
 Summaries. Section I.) [Moscow, Izd-vo M SSSR, 1960] 340 p. 5,500 copies
 printed.

Sponsoring Agency: The International Union of Pure and Applied Chemistry,
 Commission on Macromolecular Chemistry

Rech. Ed.: T. V. Polyakova.

PURPOSE: This collection of articles is intended for chemists and researchers
 interested in macromolecular chemistry.

COVERAGE: This is Section I of a multivolume work containing scientific papers
 on macromolecular chemistry in Moscow. The material includes data on the
 synthesis and properties of polymers, and on the processes of polymerization,
 copolymerization, polycondensation, and polymerization. Each text is
 presented in full or summarized in French, English, and Russian. There are
 47 papers, 28 of which were presented by Soviet, Rumanian, Hungarian, and
 Czechoslovakian scientists. No personalities are mentioned. References
 accompany individual articles.

Porushin, I. A., Yu. I. Khurina, D. T. Kozarenko, N. I. Prokhorova, and E. P. Polyakova (USSR). Polycondensation of α -Methacrylic Esters in the Presence of Carbon Dioxide	210
Kilcsi, J. A. (Hungary). On the Behavior of Mixed Furfural-Formaldehyde Phenolic Plastics	218
Kutin, N. S., and L. A. Rodivilov (USSR). On the Heterogeneous Method of the Polycondensation	228
Kikharov, M. V., P. I. Markovskaya, and S. S. Nikolova (USSR). On Some Reactions Underlying the Interfacial Polycondensation of Acid Chlorides of Dicarboxylic Acids and Diamines in the Process of Fiber Formation	237
Alexandru, I., and I. Dancu (Romania). Synthesis of Polyurethane by Interfacial Polycondensation	245
Blanchard, A. J., G. A. Larkovich, and J. A. Prindle (USSR). The Catalytic Action of Some Metallic Compounds on the Formation of Polyurethanes	255
Leish, P., and R. Chrovecak (Czechoslovakia). Some Problems of Poly- condensation in a Suspension	262
Kolubarski, A. J., E. P. Usanovskaya, and A. A. Vashchuk (USSR). Copolymers of α -Methylstyrene and Vinyl Epithalene With Other Vinyl Compounds	282
Lee, D., and M. Kolinsky (Czechoslovakia). Chain Transfer Reactions in the Polymerization of Vinyl Chloride	304
Zelinger, J. (Czechoslovakia). Study of the Kinetics of Dispersion Polymerization of p -Chlorostyrene in a Solution Containing an Aqueous Solution With a Liquid-Phase Radical	305
Reuter, I., V. Matzke, and Ya. Polach (Czechoslovakia). Thermal Stability of Polychloroprene	328
AVAILABLE: Library of Congress	
Card 9/9	
Z-7	
Organotin Polymers	
Koten, M. M., I. M. Kiseleva, and E. S. Florinitsky (USSR). The Effect of Chemical Structure on the Polymerization Activity of the Unsaturated Organometallic Compounds	167
Polymerization, M. V. (USSR). Comparative Processes in the Polycondensa- tion of Biopolymers	202
Card 6/9	
49	

KOZARENKO, R. D.

Korshak, V. V., Kozarenko, R. D. --"Synthesis of hydrocarbons by the action of hexachloroethane on organomagnesium compounds." (p. 771)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1952, Vol. 22, No. 5

1ST AND 2ND STORIES										3RD AND 4TH STORIES									
PROCESSES AND PROPERTIES INDEX																			
<div style="display: flex; justify-content: space-between;"> F K </div> <p> KOZARENKO, T. D. 3287. PRODUCTION OF HYDROCARBONS FROM ORGANIC COMPOUNDS OF MAGNESIUM BY ACTION OF HEXACHLORETHANE. Korshak, V.V. and Kozarenko, T.D. (Doklady Akad. Nauk S.S.S.R. (Rep. Acad. Sci. U.S.S.R.), 11 Feb. 1951, vol. 76, 685-687). These reactions were examined in the laboratory as a possible new method of synthesizing hydrocarbons. Magnesium compounds were obtained from bromobenzene, d-bromonaphthalene, benzyl chloride, ethyl bromide and methyl iodide. Variations were made in temperature, concentration of reagent, duration of process and nature of solvent (diethyl ether, dibutyl and diisooctyl ether, and mixtures of the latter two with the first). Hydrocarbon yields were 33-79% of the theoretical calculated from the quantity of haloid derivative taken into the reaction. (L). </p>																			
<div style="display: flex; justify-content: space-between;"> <div> MATERIALS INDEX OPEN 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 </div> <div> ASS-51A METALLURGICAL LITERATURE CLASSIFICATION 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 </div> <div> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 </div> </div>																			

TO 2 ARREN TO, T.D.

[Synthesis of hydrocarbons by the action of hexachloro-ethane on organomagnesium compounds. V. V. Korshak and T. D. Kozlovskaya (Inst. Org. Chem., Acad. Sci. U.S.S.R.), *Zhur. Obshch. Khim.*, U.S.S.R., 12, 833-4 (1949) (Engl. translation); *Zhur. Obshch. Khim.*, 12, 771-2 (1949).] (PhCH₃)₂ is obtained in 87% yield by refluxing C₂Cl₆ with PhCH₂MgCl in Bz₂O 4 hrs. at 80-90°; decompose the complex with H₂O and H₂SO₄ and fractionating the ether layer. The best yield of Ph₂ made this way is 34% at 22°, and (C₆H₅)₂ 40% at 40°. MeMgI with C₂Cl₆ yields C₆H₅ 39% and CH₄ 41%. EtMgBr with C₂Cl₆ yields C₆H₅ 77.8, C₆H₄ 14.3, and C₆H₃ 7.9%. These results indicate the intermediate formation of free radicals. In further support this idea, a soln. of an organomagnesium compd. with added C₂Cl₆ is a more vigorous initiator of styrene polymerization than when C₂Cl₆ is absent. W. M. Saltman (C

KOZARENKO, T. D.

Dissertation: "A Study of the Polycondensation of the Esters of Alpha-Aminoacids."
Cand Chem Sci, Inst of Organic Chemistry, Acad Sci USSR, Moscow, 1953. Referativnyy
Zhurnal--Khimiya, Moscow, No 7, Apr 54.

SO: SUM 284, 26 Nov 1954

KOZARENKO, T. D.

USSR/ Chemistry Organic chemistry

Card : 1/1 Pub. 40 - 13/27

Authors : Korshak, V. V., Poroshin, K. T., and Kozarenko, T. D.

Title : From the field of high molecular compounds. Part 64.- Polycondensation of ethyl ether of d,l-alanine

Periodical : Izv. AN SSSR, Otd. khim. nauk 4, 663 - 669, July - August 1954

Abstract : The polycondensation reaction of ethyl ether of d,l-alanine, was investigated at various temperatures to determine the effect of catalysts on this process. The effect of acids (including carbonic and amino acids), and bases on the rate of polycondensation reaction, is discussed. The kinetics of the polycondensation was investigated in the presence of carbonic anhydride, acetic acid, polyalanine and without the catalyst. The water-soluble products, obtained from combined polycondensation of ethyl ethers of d,l-phenylalanine and glycol, are described. Twelve references: 4 USSR; 5 German; 2 USA and 1 Swiss (1894 - 1951). Tables; graphs; diagrams.

Institution : Acad. of Sc. USSR, Institute of Organic Chemistry

Submitted : August 29, 1953

POROSHIN, K.T.; KOZARENKO, T.D.; KHURGIN, Yu.I.

Differential titration of tripeptides and diketopiperazines in the products of polycondensation of the ethyl ester of glycine. Izv. AN SSSR.Otd.khim.nauk no.5:626-628 My '56. (MIRA 9:9)

1.Institut organicheskoy khimii imeni N.D.Zelinskogo Akademii nauk SSSR.
(Titration) (Glycine) (Condensation products (Chemistry))

KOZARENKO, T.D.

USSR/Organic Chemistry. Natural Substances and Their Synthetic Analogues. E-3

Abs Jour: Ref Zhur- Khimiya, No. 8, 1957, 27003.

Author : Poroshin, K.T., Kozarenko, T.D.,
Khurgin, Yu. I.

Inst : Academy of Sciences of USSR.

Title : Mutual Conversions of Dipeptides and Their Anhydrides.

Orig Pub: Dokl. AN SSSR, 1956, 109, No. 2, 329 - 331.

Abstract: The stability of glycylglycine diketopiperazine (I) and alanylalanine diketopiperazine (II) in alkaline medium was studied. The hydrolysis constants for I and II, equal to pK_a 10.8 and 12.0 correspondingly, were computed from the measurements of hydrolysis depths of I and II at various pH in alkaline medium and 40°. The

Card 1/2

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R00082 200
USSR/Organic Chemistry. Natural Substances and Their Synthetic Analogues. E-3

Abs Jour: Ref Zhur - Khimiya, No. 8, 1957, 26003.

alkaline hydrolysis of I and II is a reaction of the first order with speed constants of $9.63 \times 10^{-4} \text{ sec}^{-1}$ for I and $2.56 \times 10^{-4} \text{ sec}^{-1}$ for II. Partial cyclization of III with formation up to about 25% of I occurs, when glycylglycine (III) is heated even under the conditions of incomplete stability of II. The order of the cyclization reaction is not below the second.

Card 2/2

KOZARENKO, T. D., KHURGIN, Yu t., and PAROSHIN, K. T.

"Mechanism and kinetics of the polycondensation of esters of amino acids," a paper presented at the 9th Congress on the Chemistry and Physics of the High Polymers, 28 Jan- 2 Feb 57, Moscow Research Inst. Organic Chemistry.

B-3,084,395

KOZARENKO, T.D.

KHURGIN, Yu.I.; POROSHIN, K.T.; KOZARENKO, T.D.

Kinetics and polycondensation mechanism of esters of α -amino acids. Report No.2. Kinetics of polycondensation of glycine ethyl ester. Izv.AN SSSR, Otd.khim. nauk no.2:174-178 F '57.
(MIRA 10:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo Akademii nauk SSSR.

(Glycine) (Condensation products (Chemistry))

Kozarenko, T.D.

USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topo-chemistry Catalysis.

B-9

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3858

Author : T.D. Kozarenko, K.T. Poroshin, Yu. I. Khurgin.
Inst : Academy of Sciences of USSR, Section of Chemical Sciences.
Title : Kinetics and Chemism of Polycondensation of α -Aminoacid Esters. 3. Influence of Carbon Dioxide on Composition of Polycondensation Products of Glycine Ethyl Ester.

Orig Pub: Izv. AN SSSR, Otd. Khim. n., 1957, No 5, 563-568.

Abstract: The composition of polycondensation products of glycine ethyl ester was studied at various ratios of the initial molar CO₂ concentrations and the monomer. The reaction product was analyzed after the monomer removal. The reaction product was treated with diethyl ester and was a thick mass containing a mixture of peptide ethyl esters. The obtained kinetic curves permit to establish 2, differing by speed, phases in the poly-

Card : 1/3

-9-

USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topo-chemistry Catalysis.

B-9

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3858

condensation process, the 1st, retarded, phase depends on the initial CO_2 concentration, and the 2nd phase is subject to identical kinetic regularities independent of the CO_2 content. The qualitative investigation of the polycondensation products was carried out by the method of distributing chromatography on paper using the systems butanol - acetic acid - water, pyridine - butanol - water and phenol - water; up to 0.1% of trilon B was added to the mobile phase in order to eliminate the influence of heavy metals contained in paper. It is shown that in the first stages of the process, glucilglycine ester is rapidly consumed in its conversion into diketopiperazine, as well as in the formation of diglycilglycine ester. The basic reaction is the addition of the monomer to peptide esters, but not the interaction of esters with peptides. The diketopiperazine con-

Card : 2/3

-10-

USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topo-chemistry Catalysis

APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R00082 200

B-9

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3858

tent was determined by the method of differential titration in various reaction stages, as well as in the sum total of various peptides. See report II in RZhKhim, 1957, 60782.

Card : 3/3

-11-

KOZARENKO, T.D.; POROSHIN, K.T.; KHURGIN, Yu.I.

Kinetics and chemism of polycondensation of α -amino acid esters.
Report No.5: Interaction of carbon dioxide with esters of glycine
and its peptides. Izv. AN SSSR. Otd. khim. nauk no.5:640-642 My '57.
(MLRA 10:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk
SSSR.

(Carbon dioxide) (Glycine) (Peptides)

APPROVED FOR RELEASE
POROSHIN, K.T.; KOZARENKO, T.D.; KHURGIN, Yu.I.

Kinetics and chemism of polycondensation of α -amino acid esters.
Report No.6: On the mechanism of polycondensation of α -amino
acid esters. Izv. AN SSSR. Otd. khim. nauk no.5:642-644 My '57.
(MLRA 10:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii
nauk SSSR.

(Amino acids) (Condensation products (Chemistry))

AUTHORS: Andreyeva, N. S., Iveronova, V. I., 62-58-3-27/30
Kozarenko, T. D., Poroshin, K. T.,
Shibnev, V. A., Shutskever, N. Ye.

TITLE: Investigation of the Structure of Peptides Containing
Glycine and l-Proline (Issledovaniye struktury peptidov,
soderzhashchikh glitsin i l-prolin)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh
Nauk, 1958, Nr 3, pp. 376-377 (USSR)

ABSTRACT: The investigation of peptides containing amino acids is
of importance for the investigations of the structure of
proteins. The stereochemical rôle of pyrrolidine rings
within the configuration of the polypeptide chain has not
yet been sufficiently explained. In general it is assumed
that the bends of the polypeptide chains are formed in such
points, where residues of proline and oxyproline are present.
At present structural investigations of the peptides and
polypeptides of numerous amino acids are carried out.
There have, however, only few works been published on the
investigation of compounds containing amino acids. The
aim of this work is the investigation of the above mentioned

Card 1/2

Investigation of the Structure of Peptides Containing Glycine and 1-Proline 62-58-3-27/30

structure of peptides. Glycyl-1-prolyl, 1-prolylglycine, carbobenzoxyglycyl-1-prolyl and the anhydride of glycyl-1-proline were synthesized. Furthermore the first stage of the x-ray analysis of the synthesized compounds was finished.

There are 1 table and 10 references, 1 of which is Soviet.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta i Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR
(Physics Department of Moscow State University and the Institute for Organic Chemistry imeni N. D. Zelinskiy, AS USSR)

SUBMITTED: October 31, 1957

Card 2/2

AUTHORS: Poroshin, K. T., Kozarenko, T. D., Shibnev, SOV/62- 58- 9- 20/26
V.A.

TITLE: The Exchange Reactions Between l-Prolylglycine-Diketopiperazine and Its Dipeptides (O vzaimoprevrashchenii diketo-piperazina l-prolilglitsina i yego dipeptidov)

PERIODICAL: Izvestiya Akademii nauk, SSSR. Otdeleniye khimicheskikh nauk, 1958, Nr 9, pp 1129 - 1132 (USSR)

ABSTRACT: Glycine, l-proline, and α -amino acids in general are especially important in relation to the question of the structure of collagen. The separation of considerable amounts of glycyl-l-proline and l-prolylglycine from hydrolysed collagen leads to the assumption that both dipeptides are structural elements in the protein molecule. The protein hydrolysis has been carried out under various conditions in the past (Refs 1-3), and this makes difficult a clear explanation of the preponderance of glycyl-l-proline and l-prolylglycine-dipeptide in the chain. The authors of this brief communication attempted to form a cyclic anhydride of glycyl-l-proline and l-prolylglycine. They further investigated the possibility of

Card 1/2

The Exchange Reactions Between l-Prolylglycine- Diketo- SOV/62-58-9-20/26
piperazine and Its Dipeptides

hydrolysing the anhydride to the dipeptide. It was found that even under moderate conditions the anhydride of l-prolylglycine forms glycyl-l-proline in base and l-prolylglycine in acid. The hydrolysis of the l-prolylglycine anhydride does not go to completion, but attains an equilibrium condition. The formation of cyclic anhydrides of both dipeptides is simple, especially for glycine-l-proline. There are 1 figure and 7 references, 1 of which is Soviet.

ASSOCIATION: Institut organicheskoy khimii im.N.D.Zelinskogo Akademii nauk
SSSR (Institute of Organic Chemistry imeni N.D.Zelinskiy, AS USSR)

SUBMITTED: March 22, 1958

Card 2/2

5(3)

AUTHORS:

Poroshin, K. T., Shibnev, V. A.,
Kozarenko, T. D.

SOV/62-59-4-28/42

TITLE:

Synthesis of Peptides Containing L-Proline and Glycine (Sintez peptidov, sodержashchikh L-prolin i glitsin)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 4, pp 736-738 (USSR)

ABSTRACT:

This is a short report on the investigation of the synthesis and properties of L-prolylglycyl-L-proline, L-prolylglycyl-L-prolylglycine and of polymers which contain these groups in the molecular chain. The peptides mentioned can be synthesized by the method of the mixed anhydrides (Ref 9) and the respective polymers by the method of the polycondensation of methyl esters of these peptides. The synthesis of L-prolylglycyl-L-prolylglycine esters was carried out in two ways: 1) by gradual addition of the methyl esters of amino acids (glycine, L-proline, glycine) to carbobenzoxy-L-proline (Scheme, I); 2) by addition of the methyl ester of L-prolylglycine to carbobenzoxy-L-prolylglycine (stage A, Scheme). The synthesized peptides and their esters were identified by

Card 1/2

Synthesis of Peptides Containing L-Proline and
Glycine

SOV/62-59-4-28/42

means of descending chromatography (Table). There are 1 table
and 11 references, 2 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii
nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy
of the Academy of Sciences, USSR)

SUBMITTED: July 19, 1958

Card 2/2

5(3,4)

AUTHORS:

SOV/62-59-5-31/40
Noskova, N. B., Poroshin, K. T., Kozarenko, T. D.

TITLE:

On the Accelerating Effect of the Peptide Esters on the Polycondensation Reaction of Glycine-ethyl Ester (Ob uskoryayushchem deystvii na reaktsiyu polikondensatsii etilovogo efira glitsina efirov peptidov)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 935-936 (USSR)

ABSTRACT:

On the basis of the observed acceleration of the condensation reaction of glycine-ethyl ester by addition of the esters of the polymer, the autocatalytic character of this reaction has already been pointed out in previous papers (Ref 1). In the present paper the autocatalytic character of the polycondensation reaction of the esters of amino-acids is investigated, for which purpose the influence exercised by certain additions of tripeptide and polycondensate upon the rate of the polycondensation reaction of glycine-ethyl ester is subjected to a close examination. The polycondensation reaction mentioned was investigated for the purpose of determining its character, i.e. with the addition of CO_2 , CO_2 + tripeptide ester, and

Card 1/2

SOV/62-59-5-31/40
On the Accelerating Effect of the Peptide Esters on the Polycondensation
Reaction of Glycine-ethyl Ester

further without the addition of CO_2 , addition of polycondensate, and addition of tripeptide ester in dependence on the time of reaction (Figs 1,2). It was found that the reaction time of polycondensation in the absence of CO_2 passes considerably more slowly and is divided into two stages. A rather long first stage, in which hardly any polycondensation occurs at all, (58 hours) is followed by a second in which the kinetics of the development of polycondensation is of the first order. The presence of polycondensate shortens the first stage. The reaction kinetics of the second stage remains one of the first order owing to the additions. There are 2 figures and 8 references, 4 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: October 22, 1958
Card 2/2

5(3)

AUTHORS:

Khurgin, Yu. I., Poroshin, K. T., Kozarenko, T. D.

SOV/62-59-5-34/40

TITLE:

The Kinetics of the Polycondensation of Glycine-ethyl Esters in the Presence of Its Carbamate (Kinetika polikondensatsii etilovogo efira glitsina v prisutstvii yego karbamata)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 941-943 (USSR)

ABSTRACT:

In the course of previous investigations of the kinetics of the polycondensation of esters of the α -amino acids it has been shown that the initiating effect of carbon dioxide is connected with the formation of the symmetric carbamate:

$R'OOC.CHR.NH_2^+ \cdot ^-OOC.NH.CHR.COOR'$. Carbamate formation is an endothermic reaction, and therefore overheating of the reaction mass may easily occur if CO_2 is added at an increased rate. The carbamate itself causes no thermal impediment to polycondensation. In this connection, the kinetics of the consumption of monomers and the variation of the composition of the polycondensed glycine-ethyl ester obtained in the presence of a carbamate was investigated in the present case. The investi-

Card 1/3

SOV/62-59-5-34/40

The Kinetics of the Polycondensation of Glycine-ethyl Esters in the Presence of Its Carbamate

gation methods are the same as those of reference 1. The content of free monomers, the reaction product yield, and their diketopiperazine and amino nitrogen content was determined. Figures 1 and 2 show the velocity constant of the consumption of monomers and, accordingly, the concentration of the diketopiperazines in the polycondensation products when carbamate and CO_2 are used as initiators. From the difference alone between the consumption of monomers conclusions are drawn as to a difference in the kinetics of the aggregation of the diketopiperazines. From figure 2, which shows the concentration of diketopiperazines in the final products, a distinct difference in the two initiators may be recognized, especially at the beginning of the reaction. The difference is caused by heating the reaction mass by the endothermal formation of carbamate when using the CO_2 -initiator. When carbamate is used as initiator, the reaction product yield remains proportional to the time of reaction, and also the amino nitrogen ($\text{NH}_2\text{-N}$) content in the reaction products remains constant. The authors thank Ye. V. Leonova for her assistance.

Card 2/3

SOV/62-59-5-34/40

The Kinetics of the Polycondensation of Glycine-ethyl Esters in the Presence of Its Carbamate

The activation energy of the affiliation of the monomer to the peptide was determined. There are 2 figures and 5 references, 4 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: October 28, 1958

Card 3/3

5(3)
 AUTHORS: Shibnev, V. A., Kozarenko, T. D., Poroshin, K. T. SOV/62-59-6-31/36

TITLE: On the Separation of L-Proline and L-Oxyproline by the Rhodanil Method (O vydelenii L-prolina i L-oksirolina rodanilatnym sposobom)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 6, pp 1132 - 1133 (USSR)

ABSTRACT: By the rhodanyl method for the separation of L-proline and L-oxyproline the imino acids are always obtained with some impurities because of the great similarity of these acids. The one always contains an addition of the other. Therefore the method was changed somewhat so that by means of it it is possible not only to separate the L-proline required but also the L-oxyproline in a chromatographically pure form from the hydrolisate of the gelatin. The yield in L-oxyprolin obtained with this method was 12% of this imino acid contained in the gelatin. The separation of the imino acids from the gelatin was made according to Bergmann. After the separation of L-proline (pure) from the mixture of L-proline and L-oxyproline, the latter (60%) is obtained with an admixture of 40% L-proline. This mixture is treated with methanol and dry ether and the powder of the imino acids thus obtained

Card 1/2

On the Separation of L-Proline and L-Oxyproline by the
Rhodanilic Method

SOV/62-59-6-31/36

from methanol water is subjected to repeated re-crystallization, which leads to L-oxyproline in purest form. The L-proline contained in the methanol filtrate is then in a similar way purified from the L-oxyproline still contained in vestige, and thus finally also purest L-proline is obtained. There are 6 references, 1 of which is Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk
SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the
Academy of Sciences, USSR)

SUBMITTED: December 9, 1958

Card 2/2

5(3)

AUTHORS:

Kozarenko, T.D., Noskova, N.B.,
Poroshin, K.T.

SOV/62-59-7-25/38

TITLE:

On the Chlorhydrate-Method for the Determination of the Monomer in the Reaction of Polycondensation of the Esters of α -Amino Acids. (O khlorgidratnom metode opredeleniya monomera v reaktsii polikondensatsii efirov α -aminokislot)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 7, pp 1324 - 1327. (USSR)

ABSTRACT:

The synthesis of polyamino acids by polycondensation develops chiefly in the first stage by successive chain formation from the monomers (Type A) and in the further stages by interreaction of the polymer molecules (Type B). The reaction-type A develops more rapidly than the type B. The consumption of monomers for chain formation is determined in the final product from the non-reacting monomers. Separation of these monomers is easy, but the determination in the ether extract is connected with some difficulties. A new method was elaborated by the authors precipitating the monomers as their hydrochlorides. Beside the possibility of quantitative separation of the salts from

Card 1/2

On the Chlorhydrate-Method for the Determination SOV/62-59-7-25/58
of the Monomer in the Reaction of Polycondensation of the Esters of
 α -Amino Acids.

the ether extract, this method offers the advantage that
the salts are also not destroyed by warming to

100°; so they may be used for further polycondensation.

The determination of the ethyl esters of glycine, d, l-phenylalanine
l-alanine, d, l-valine and l-proline is described in the
experimental part. The results are listed in tables 1-4.
There are 4 tables and 12 references, 2 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N.D. Zelinskogo Akademii
nauk SSSR
(Institute of Organic Chemistry imeni N.D. Zelinskiy of the
Academy of Sciences, USSR)

SUBMITTED: November 30, 1957

Card 2/2

5(3)

AUTHORS:

Khurgin, Yu.I., Kozarenko, T.D.,
Poroshin, K.T.

SOV/62-59-7-26/38

TITLE:

The Kinetics and Chemism of the Polycondensation of the Esters of α -Amino Acids (Kinetika i khimizm polikondensatsii efirov α -aminokislot)
VIII. The Influence of the Initial Content of Carbamate on the Velocity of the Polycondensation of the Ethyl-Ester of Glycine. (Sobshcheniye 3. Vliyaniye nachal'nogo soderzhaniya karbamata na skorost' polikondensatsii etilovogo efira glitsina)

PERIODICAL:

Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1959, Nr 7 pp 1328 - 1332 (USSR)

ABSTRACT:

Introducing the well-known mechanism of polycondensation of the esters of α -amino acids under the influence of simple initiators- in this case CO_2 - and the formation of initiator substrate is described briefly (Refs 1-4). It had been shown, that the original initiator for the polycondensation is not CO_2 , but the symmetric carbamate as the arising substrate. If this is true, it must be the same for

Card 1/5

The Kinetics and the Chemism of the Polycondensation SOV/62-59-7-26/38
of the Esters of α -Amino Acids. VIII. The Influence of the Initial
Content of Carbamate on the Velocity of the Polycondensation of the
Ethyl-Ester of Glycine

the velocity of polycondensation, no matter whether carbamate
is formed by the addition of CO_2 or is added directly. More-
over, for a small amount of $i/m \sim i/m$ is the relative ,
molar initial concentration of the initiator i , related
to the monomer m - the consumption of the monomer must
be proportional to the initial amount of carbamate. In the
investigation of kinetics it had been shown that this
proportionality was maintained for all initial
concentrations,. The consumption of monomer may be represented
by the following equation:

$$m(t) = (1 - 2 \frac{i}{m}) e^{-k(\frac{i}{m})t}$$

In this paper the above named assumption is investigated.
The dependence of the velocity of monomer consumption on
the initial concentration of the initiator was investigated.
The content of free monomers in the reaction product was

Card 2/5

The Kinetics and Chemism of the Polycondensation of the Esters of α -Amino Acids. VIII. The Influence of the Initial Content of Carbamate on the Velocity of the Polycondensation of the Ethyl-Ester of-Glycine SOV/62-59-7-26/38

determined by means of the improvement method. Moreover, the consumption of monomers was investigated with immediate initiation with symmetric carbamate. The experimental data for the consumption of monomers with initial concentrations of initiator CO_2 $\xi_0 = 0.01, 0.02, 0.04, 0.08$ and 0.16 are demonstrated in a semi-logarithmic scale in figure 1. For all i/m monomer's consumption is first class. The extrapolation of the straight line cuts the ordinate in the point $\lg m = 0 (m = 1) = m^0$. m^0 is reduced with increasing ξ_0 . Therefore m^0 is the exact initial concentration for the secondary stage of the reaction. In the equation obtained from the experiment:

$$m(t) = m^0 \cdot e^{-kt}$$

Card 3/5 m^0 and k were calculated by the method of the least squares.

The Kinetics and Chemism of the Polycondensation SOV/62-59-7-26/38
of the Esters of α - Amino Acids. VIII. The Influence of the Initial
Content of Carbamate on the Velocity of the Polycondensation of the
Ethyl-Ester of Glycine.

The results are listed in Table 1. $\frac{1 - m^0}{k_0}$ was calculated

as the stoichiometrical coefficient of the reciprocal effect
of the monomer with CO_2 in the primary stage of reaction.

In this case of carbamate initiation m^0 was found to
be 0.995 i.e. it was equal to the initial amount of the
monomer. This result may serve as evidence that carbamate
is formed in the first stage of the reaction. The constants
of velocity of monomer consumption in dependence on the
initial concentrations of carbamate i/m are listed in table 2.
The kinetic curve (Fig 2) is a straight line up to
concentrations $i/m = 0.07$. Moreover the velocity of monomer
consumption was proved to be independent of the length
of the formed chain of polymers. There are 2 figures, 2 tables,
and 7 references, 5 of which are Soviet.

Card 4/5

The Kinetics and Chemism of the Polycondensation of the Esters of α -Amino Acids. VIII. The Influence of the Initial Content of Carbamate on the Velocity of the Polycondensation of the Ethyl-Ester of Glycine. SOV/62-59-7-26/38

ASSOCIATION: Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR
(Institute of Organic Chemistry imeni N.D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: November 30 , 1957

Card 5/5

5(3), 5(4)

SOV/62-59-8-18/42

AUTHORS: Poroshin, K. T., Khurgin, Yu. I., Kozarenko, T. D.

TITLE: Kinetics and Chemism of the Polycondensation of Esters of the α -Amino Acids and Peptides. Communication 9. On the Autocatalytic Nature of the Polycondensation of the Ethylester of Glycine in the Presence of Carbon Dioxide

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 8, pp 1453-1457 (USSR)

ABSTRACT: In the present paper the assumption concerning the autocatalytic nature of the polycondensation reaction of the esters of α -amino acids in the presence of CO_2 is investigated. For this purpose the yield of the polycondensation products of ethylglycine ester was measured and their composition determined. The condensation product was fractionated and the products of the solid phase determined by weighing. It consisted of ethyl esters of glycine peptides of various lengths, and di-ketopiperazine. Several test series with different CO_2 contents in the initial products were carried out. From the yields obtained it could be seen that the polycondensation of ethylglycine ester is an autocatalytic process with a gradual growth of the peptide chain. The growth of the peptide

Card 1/2